PRINCE EDWARD ISLAND

DAIRY FARM BUSINESS ANALYSIS

1981

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INTRODUCTION

This report is a summary of the business performance of thirty-three (33) industrial milk farms and twenty-four (24) fluid milk farms on Prince Edward Island for the calendar year 1981.

The farms selected for this study were not chosen on a random basis, therefore, the results are not necessarily representative of all dairy farms on P.E.I. For this reason, care should be exercised when interpreting these results.

The purpose of this study was to provide benchmark information for use by farmers, agricultural representatives, farm management personnel and others. Comparing the average results of the study with their own farm records may assist dairy farm operators in identifying problems and making management decisions.

The information used in this report includes only farms with 75 per cent or more of their income from the dairy enterprise.

The fifty-seven farms sampled were grouped into two major categories - industrial milk and fluid milk farms.

Detailed analysis was carried out for each group and also for subgroups classified by number of cows and by production per cow.

Industrial Section

1) Thirty-three industrial milk farms.
2) Sixteen with less than 33 cows.
3) Seventeen with 33 cows or more.
4) Sixteen producing less than 5,300 litres/cow/year.
5) Seventeen farms producing more than 5,300 litres/cow/year.

Fluid Section

1) Twenty-four fluid farms.
2) Twelve farms with forty cows or less.
3) Twelve farms with more than forty cows.
4) Twelve farms producing less than 6,000 litres/cow/year.
5) Twelve farms producing more than 6,000 litres/cow/year.

The results of each subgroup are presented as:

1) Revenue
2) Expenses
3) Income Summary
4) Milk Production Costs
5) Balance Sheet
6) Management Analyis
   (i) Financial
   (ii) Production
   (iii) Labour

It should be noted that the Value of Unpaid Family Labor and Interest on Equity are not deducted from Net Farm Income to arrive at Returns to Operator Labor and Management as presented in the Income sections of previous years reports. These values were purposely omitted due to the difficulty in determining a realistic value for Return (interest) on Equity. It is however, at the same time reconized that these values are legitimate costs of production. For the same reasons no attempt was made to estimate <u>net</u> milk production costs.

INDUSTRIAL MILK SECTION

AVERAGE OF THIRTY-THREE

INDUSTRIAL MILK FARMS

REVENUE

Milk sales, including the federal milk subsidy, amounted to 79 per cent of the total farm revenue. The price per hectolitre (H.L.) including the federal milk subsidy was $38.19. The total operating (cash) revenue was $90,754.

There was an adjustment made of $689 or -.77 per cent to operating revenue to arrive at Total Farm Revenue. This represented the net change in inventory (-3.33 per cent livestock, 2.56 per cent crop and supply). For the majority of farm changes in inventory were estimated values.

REVENUE

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
FLUID MILK	0.00	0.	0.00	0.00
INDUSTRIAL MILK	65.78	59229.	1713.03	31.82
MILK SUBSIDY	13.16	11847.	342.63	6.37
L.STOCK DAIRY SALES	8.83	7947.	229.83	4.27
OTHER L.STOCK SALES	2.92	2628.	76.02	1.41
FIELD CROP SALES	1.89	1705.	49.32	.92
CASH CROP SALES	4.20	3781.	109.36	2.03
MISCELLANEOUS SALES	3.99	3597.	104.03	1.93
OPERATING REVENUE	100.77	90734.	2624.22	48.75
L.STOCK INVEN. CH.	-3.33	-2998.	-86.70	-1.61
CROP-SUPP. INV. CH.	2.56	2309.	66.78	1.24
ADJ. FOR INV. CH.	-.77	-689.	-19.92	-.37
TOTAL FARM REVENUE	100.00	90046.	2604.30	48.38

EXPENSES

Dairy feed was the largest current expense followed by crop expenses and tractor-machinery repairs, 22.4 per cent, 12.1 per cent and 9.2 per cent respectively. The total current expenses amounted to $73,759 this was 87.85 per cent of total farm expenses.

Building and machinery depreciation made up the remaining 12.15 per cent (a total of $10,202) resulting in a total farm expenses of $83,961.

Depreciation for buildings was calculated at 10 per cent of the asset value. Machinery and equipment depreciation was estimated at 25 per cent.

EXPENSES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
MILK HAULING	3.11	2612.	75.54	1.40
DAIRY FEED	22.40	18804.	543.85	10.10
L.STOCK PURCHASES	5.66	4748.	137.33	2.55
VET AND DRUGS	1.78	1491.	43.13	.80
BREEDING	.18	150.	4.34	.08
DAIRY SUPPLIES	1.24	1044.	30.19	.56
MILK MARKETING	7.74	6500.	188.00	3.49
OTHER CROP EXPENSE	12.10	10161.	293.88	5.46
BLDG. - FENCE RPR.	2.25	1891.	54.69	1.02
UTILITIES	3.04	2550.	73.74	1.37
TRACTOR - MACH. RPR.	9.20	7725.	223.41	4.15
TRUCK AND AUTO	.78	653.	18.89	.35
INTEREST	8.20	6883.	199.08	3.70
LABOUR	5.06	4248.	122.87	2.28
TAXES	.79	666.	19.28	.36
INSURANCE	1.12	939.	27.14	.50
MISCELLANEOUS	3.21	2694.	77.91	1.45
TOTAL CURRENT EXP.	87.85	73759.	2133.25	39.63
BLDG. DEPRECIATION	2.15	1809.	52.31	.97
MACH. DEPRECIATION	10.00	8393.	242.76	4.51
TOTAL DEPRECIATION	12.15	10202.	295.07	5.48
TOTAL FARM EXPENSES	100.00	83961.	2428.32	45.11

INCOME SUMMARY

There are a number of different ways to measure income. In this section, two of the more common methods are highlighted.

1. Net Cash Income is the difference between annual operating revenue and total current expenses. For this group of farms, Net Cash Income amounted to $16,975 or $491 per cow.

2. Net Farm Income is the difference between annual operating revenue and current expenses with adjustments made for inventory change and depreciation. For this group of farms, Net Farm Income averaged $6,085 or $176 per cow. Net farm income in this instance represents the return to the factors used in the production of milk. These include operator's labour (1.22 person years) and management, unpaid family labour (.58 person years) as well as a return to $175,489 of Owner's Equity.

INCOME SUMMARY

	TOTAL ($)	PER COW ($)	PER 100 LITRES ($)
Total Operating Farm Income	90,734	2,624	48.75
Total Current Farm Expenses	73,759	2,133	39.63
NET CASH INCOME	16,975	491	9.12
Plus Inventory Change	-689	-20	-0.37
Less Depreciation	10,202	295	5.48
NET FARM INCOME	6,085	176	3.27

PRODUCTION COSTS

The cost of producing a hectolitre of milk for this group of farms was $34.92. Note that costs used in this calculation did not include operator and family labour and interest on equity. Milk receipts per hectolitre were $38.19 leaving a return of $3.27.

MILK PRODUCTION COSTS

	TOTAL	PER COW	PER 100 LITRES
	($)	($)	($)
TOTAL CURRENT EXP.	73759.	2133.25	39.63
DEPRECIATION	10202.	295.07	5.48
INVENTORY CHANGE	-689.	-19.92	-.37
TOTAL FARMCOST	84650.	2448.24	45.48
SALES (EXCL. MILK)	19658.	568.56	10.56
COST OF PROD. MILK	64992.	1879.68	34.92
MILK RECEIPTS	71076.	2055.67	38.19
NET RETURN	6085.	175.98	3.27

BALANCE SHEET

For this group of farms, the balance sheet indicated an average investment of $237,951 and a debt load of $62,463. This showed an equity position of 74 per cent.

Land values were estimated to be $500 per acre for cleared land and $150 per acre for woodland.

Building and machinery values used where the undepreciated portion from the Capital Cost Allowance Schedule of the 1981 income tax returns.

Livestock was valued using figures from the farmer's record system when possible. If the figures were not available, the farmer was asked to estimate the value.

Crops and supplies were also valued using figures from the record keeping system. If estimates were necessary, the following guidelines were used:

Hay	$1.00/bale
Straw	$.60/bale
Mixed Grain	$143 per tonne
Silage	Variable (depending on type and moistures level)

BALANCE SHEET

ASSETS

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
LAND	36.60	87083.	2518.62	46.79
BUILDINGS	8.17	19447.	562.45	10.45
MACH. AND EQUIPMENT	14.49	34468.	996.88	18.52
LIVESTOCK	32.66	77727.	2248.01	41.76
CROPS AND SUPPLIES	7.43	17675.	511.20	9.50
MILK QUOTA	.13	303.	8.76	.16
ACCTS. RECEIVABLE	.17	396.	11.44	.21
CASH	.36	853.	24.67	.46
TOTAL ASSETS	100.00	237951.	6882.03	127.85

LIABILITIES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRE
	(%)	($)	($)	($)
SHORT TERM	9.82	6131.	177.32	3.29
INTERMEDIATE TERM	33.57	20968.	606.44	11.27
LONG TERM	56.62	35364.	1022.79	19.00
TOTAL LIABILITIES	100.00	62463.	1806.55	33.56
OWNER EQUITY		175489.	5075.48	94.29

MANAGEMENT ANALYSIS

A number of management factors were calculated to illusrate the financial, production and labour position for this group of dairy farms. A glossary of terms (see Appendix) provides definitions for the various management criteria examined.

FINANCIAL ANALYSIS:

Current Assets/Current Liabilities	3.09
Total Assets/total Liabilities	3.81
Debt/Equity	.36
Price Received per H.L. ($)	38.19
Net Farm Income Per Cow ($)	175.98
Investment Per Cow ($)	6,882.03
Value of Milk Sold Per Cow ($)	2,055.66
Value of Milk Sold ($)	71,076.00
Capital Turnover (years)	2.63
Equity in Business (%)	73.75
Return on Equity (%)	-6.18
Return on Investment (%)	-1.67

PRODUCTION ANALYSIS:

Average Number of Cows (head)	34.58
Fluid Milk Sold (lbs.)	0.00
(litres)	0.00
Industrial Milk Sold (lbs.)	422,500.10
(litres)	186,123.39
Total Milk Sold (lbs.)	422,500.10
(litres)	186,123.39
Milk Sold/Cow (lbs./cow)	12,219.55
(litres/cow)	5,383.06
Feed Expense/Milk Sales (%)	31.75
Feed Expense/Total Expense (%)	22.40

LABOUR ANALYSIS:

Worker Equivalents - family	.58
Worker Equivalents - operator	1.22
Worker Equivalents - Hired Labour	.50
Total Worker Equivalents	2.30
Milk Sold/Worker Equivalent (lbs.)	183,695.70
(litres)	80,923.21
Cows/Worker Equivalent (Head/Worker)	15.03
Labour Cost/Cow ($)	612.49

AVERAGE OF SIXTEEN FARMS WITH

LESS THAN 33 COWS

REVENUE

Milk sales, including the federal milk subsidy, amounted to 79 per cent of the total farm revenue. The price per hectolitre (H.L.) including the federal milk subsidy was $36.67. The total operating (cash) revenue was $61,194 which was 99.5 per cent of total farm revenue.

The remaining .5 per cent resulted from changes in inventory (-0.88 per cent livestock, 1.39 per cent crop and supply). For the majority of farms, changes in inventory were estimated values.

REVENUE

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
FLUID MILK	0.00	0.	0.00	0.00
INDUSTRIAL MILK	66.41	40848.	1663.03	30.72
MILK SUBSIDY	12.85	7906.	321.86	5.95
L.STOCK DAIRY SALES	8.12	4996.	203.39	3.76
OTHER L.STOCK SALES	5.02	3087.	125.69	2.32
FIELD CROP SALES	.96	589.	23.99	.44
CASH CROP SALES	2.76	1696.	69.06	1.28
MISCELLANEOUS SALES	3.37	2071.	84.31	1.56
OPERATING REVENUE	99.49	61194.	2491.34	46.02
L.STOCK INVEN. CH.	-.88	-544.	-22.14	-.41
CROP-SUPP. INV. CH.	1.39	858.	34.92	.65
ADJ. FOR INV. CH.	.51	314.	12.78	.24
TOTAL FARM REVENUE	100.00	61508.	2504.13	46.26

EXPENSES

Dairy feed was the largest current expense followed by crop expenses and tractor-machinery repairs; 23 per cent, 11 per cent, and 9.5 per cent. The total current expenses amounted to $48,624 this was 88 per cent of total farm expenses.

Building and machinery depreciation made up the remaining 12 per cent (a total of $6,537) resulting in a total farm expenses of $55,161.

Depreciation for buildings was calculated at 10 per cent of the asset value. Machinery and equipment depreciation was estimated at 25 per cent.

EXPENSES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
MILK HAULING	3.29	1817.	73.98	1.37
DAIRY FEED	22.82	12588.	512.50	9.47
L.STOCK PURCHASES	3.96	2186.	88.99	1.64
VET AND DRUGS	2.26	1248.	50.82	.94
BREEDING	.24	134.	5.46	.10
DAIRY SUPPLIES	1.17	644.	26.21	.48
MILK MARKETING	8.18	4512.	183.71	3.39
OTHER CROP EXPENSE	10.82	5968.	242.98	4.49
BLDG. - FENCE RPR.	2.89	1594.	64.91	1.20
UTILITIES	3.30	1822.	74.17	1.37
TRACTOR - MACH. RPR.	9.52	5253.	213.85	3.95
TRUCK AND AUTO	1.10	607.	24.71	.46
INTEREST	7.78	4289.	174.62	3.23
LABOUR	4.76	2627.	106.95	1.98
TAXES	.92	509.	20.71	.38
INSURANCE	1.32	729.	29.69	.55
MISCELLANEOUS	3.80	2096.	85.32	1.58
TOTAL CURRENT EXP.	88.15	48624.	1979.61	36.57
BLDG. DEPRECIATION	2.80	1543.	62.83	1.16
MACH. DEPRECIATION	9.05	4993.	203.29	3.76
TOTAL DEPRECIATION	11.85	6537.	266.12	4.92
TOTAL FARM EXPENSES	100.00	55161.	2245.73	41.49

INCOME SUMMARY

There are a number of different ways to measure income. In this section, two of the more common methods are highlighted.

1. Net Cash Income is the difference between annual operating revenue and total current expenses. For this group of farms, Net Cash Income amounted to $12,570 or $511 per cow.

2. Net Farm Income is the difference between annual operating revenue and current expenses with adjustments made for inventory change and depreciation. For this group of farms, Net Farm Income averaged $6,347 or $258 per cow. Net farm income in this instance represents the return to factors used in the production of milk. These include operator's labour (1.08 person years) and management unpaid family labour (.64 person years) as well as a return to $138,286 of Owner's Equity.

INCOME SUMMARY

	TOTAL	PER COW	PER 100 LITRES
	($)	($)	($)
Total Operating Farm Income	61,194	2,491	46.02
Total Current Farm Expenses	48,624	1,980	36.57
NET CASH INCOME	12,570	511	9.45
Plus Inventory Change	314	13	0.24
Less Depreciation	6,537	266	4.92
NET FARM INCOME	6,347	258	4.77

PRODUCTION COSTS

The cost of producing a hectolitre of milk for this group of farms was $31.89. Note that costs used in this calculation did not include operator and family labour and interest on equity. Milk receipts per hectolitre were $36.67 leaving a return of $4.77.

MILK PRODUCTION COSTS

	TOTAL	PER COW	PER 100 LITRES
	($)	($)	($)
TOTAL CURRENT EXP.	48624.	1979.61	36.57
DEPRECIATION	6537.	266.12	4.92
INVENTORY CHANGE	314.	12.78	.24
TOTAL FARMCOST	54847.	2232.94	41.25
SALES (EXCL. MILK)	12440.	506.45	9.36
COST OF PROD. MILK	42407.	1726.49	31.89
MILK RECEIPTS	48754.	1984.89	36.67
NET RETURN	6347.	258.40	4.77

BALANCE SHEET

For this group of farms, the balance sheet indicated an average investment of $175,890 and a debt load of $37,603. This showed an equity position of 79 per cent.

Land values were estimated to be $500 per acre for cleared land and $150 per acre for woodland.

Building and machinery values used where the undepreciated portion from the Capital Cost Allowance Schedule of the 1981 income tax returns.

Livestock was valued using figures from the farmer's record system when possible. If the figures were not available, the farmer was asked to estimate the value.

Crops and supplies were also valued using figures from the record keeping system. If estimates were necessary, the following guidelines were used:

Hay	$1.00/ bale
Straw	$.60/ bale
Mixed Grain	$143 per tonne
Silage	Variable (depending on type and moistures level)

BALANCE SHEET

ASSETS

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
LAND	38.50	67713.	2756.74	50.93
BUILDINGS	10.31	18135.	738.32	13.64
MACH. AND EQUIPMENT	12.95	22778.	927.34	17.13
LIVESTOCK	29.83	52474.	2136.36	39.47
CROPS AND SUPPLIES	7.39	13005.	529.48	9.78
MILK QUOTA	0.00	0.	0.00	0.00
ACCTS. RECEIVABLE	.29	503.	20.49	.38
CASH	.73	1281.	52.16	.96
TOTAL ASSETS	100.00	175890.	7160.90	132.29

LIABILITIES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
SHORT TERM	7.24	2721.	110.77	2.05
INTERMEDIATE TERM	11.24	4226.	172.03	3.18
LONG TERM	81.53	30657.	1248.12	23.06
TOTAL LIABILITIES	100.00	37603.	1530.93	28.28
OWNER EQUITY		138286.	5629.97	104.01

MANAGEMENT ANALYSIS

A number of management factors were calculated to illusrate the financial, production and labour position for this group of dairy farms. A glossary of terms (see Appendix) provides definitions for the various management criteria examined.

FINANCIAL ANALYSIS:

Current Assets/Current Liabilities	5.44
Total Assets/total Liabilities	4.68
Debt/Equity	.27
Price Received per H.L. ($)	36.67
Net Farm Income Per Cow ($)	258.40
Investment Per Cow ($)	7,160.90
Value of Milk Sold Per Cow ($)	1,984.89
Value of Milk Sold ($)	48,754.00
Capital Turnover (years)	2.84
Equity in Business (%)	78.62
Return on Equity (%)	-6.66
Return on Investment (%)	2.81

PRODUCTION ANALYSIS:

Average Number of Cows (head)	24.56
Fluid Milk Sold (lbs.)	0.00
(litres)	0.00
Industrial Milk Sold (lbs.)	301,819.48
(litres)	132,960.13
Total Milk Sold (lbs.)	301,819.48
(litres)	132,960.13
Milk Sold/Cow (lbs./cow)	12,287.82
(litres/cow)	5,413.13
Feed Expense/Milk Sales (%)	30.82
Feed Expense/Total Expense (%)	22.82

LABOUR ANALYSIS:

Worker Equivalents - family	.64
Worker Equivalents - operator	1.08
Worker Equivalents - Hired Labour	.31
Total Worker Equivalents	2.02
Milk Sold/Worker Equivalent (lbs.)	149,415.59
(litres)	65,821.84
Cows/Worker Equivalent (Head/Worker)	12.16
Labour Cost/Cow ($)	743.28

AVERAGE OF SEVENTEEN FARMS WITH

THIRTY-THREE COWS OR MORE

REVENUE

Milk sales, including the federal milk subsidy, amounted to 79 per cent of the total farm revenue. The price per hectolitre (H.L.) including the federal milk subsidy was $39.00. The total operating (cash) revenue was $118,538.

There was an adjustment made of $-1,633 or $-1.40 per cent to operating revenue to arrive at Total Farm Revenue. This represented a net change in inventory ($-4.54 per cent livestock, 3.14 percent crops). For the majority of farms, changes in inventory were estimated values.

REVENUE

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
FLUID MILK	0.00	0.	0.00	0.00
INDUSTRIAL MILK	65.46	76529.	1739.30	32.41
MILK SUBSIDY	13.31	15556.	353.55	6.59
L.STOCK DAIRY SALES	9.17	10724.	243.73	4.54
OTHER L.STOCK SALES	1.88	2196.	49.92	.93
FIELD CROP SALES	2.36	2756.	62.63	1.17
CASH CROP SALES	4.91	5743.	130.53	2.43
MISCELLANEOUS SALES	4.31	5033.	114.39	2.13
OPERATING REVENUE	101.40	118538.	2694.04	50.19
L.STOCK INVEN. CH.	-4.54	-5308.	-120.63	-2.25
CROP-SUPP. INV. CH.	3.14	3675.	83.52	1.56
ADJ. FOR INV. CH.	-1.40	-1633.	-37.11	-.69
TOTAL FARM REVENUE	100.00	116905.	2656.93	49.50

EXPENSES

Dairy feed was the largest current expense followed by crop expenses and tractor-machinery repairs; 22 per cent, 13 per cent, 9 per cent respectively. The total current expenses amounted to $97,415 this was 88 per cent of total farm expenses.

Building and machinery depreciation made up the remaining 12 per cent (a total of $13,652) resulting in a total farm expenses of $111,067.

Depreciation for buildings was calculated at 10 per cent of the asset value. Machinery and equipment depreciation was estimated at 25 per cent.

EXPENSES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
MILK HAULING	3.02	3360.	76.36	1.42
DAIRY FEED	22.20	24654.	560.32	10.44
L.STOCK PURCHASES	6.45	7160.	162.72	3.03
VET AND DRUGS	1.55	1720.	39.09	.73
BREEDING	.15	165.	3.76	.07
DAIRY SUPPLIES	1.28	1420.	32.28	.60
MILK MARKETING	7.54	8371.	190.25	3.54
OTHER CROP EXPENSE	12.70	14107.	320.62	5.97
BLDG. - FENCE RPR.	1.95	2170.	49.31	.92
UTILITIES	2.91	3235.	73.52	1.37
TRACTOR - MACH. RPR.	9.05	10051.	228.43	4.26
TRUCK AND AUTO	.63	696.	15.83	.29
INTEREST	8.40	9325.	211.93	3.95
LABOUR	5.20	5774.	131.23	2.45
TAXES	.73	815.	18.52	.35
INSURANCE	1.02	1135.	25.80	.48
MISCELLANEOUS	2.93	3256.	74.01	1.38
TOTAL CURRENT EXP.	87.71	97415.	2213.98	41.25
BLDG. DEPRECIATION	1.85	2058.	46.78	.87
MACH. DEPRECIATION	10.44	11594.	263.49	4.91
TOTAL DEPRECIATION	12.29	13652.	310.27	5.78
TOTAL FARM EXPENSES	100.00	111067.	2524.25	47.03

INCOME SUMMARY

There are a number of different ways to measure income. In this section, two of the more common methods are highlighted.

1. Net Cash Income is the difference between annual operating revenue and total current expenses. For this group of farms, Net Cash Income amounted to $21,123 or $480 per cow.

2. Net Farm Income is the difference between annual operating revenue and current expenses with adjustments made for inventory change and depreciation. For this group of farms, Net Farm Income averaged $5,838 or $132 per cow. Net farm income in this instance represents the return to factors used in the production of milk. These include operator's labour (1.35 person years) and management unpaid family labour (.53 person years) as well as a return to $210,503 of Owner's Equity.

INCOME SUMMARY

	TOTAL	PER COW	PER 100 LITRES
	($)	($)	($)
Total Operating Farm Income	118,538	2,694	50.19
Total Current Farm Expenses	97,415	2,214	41.25
NET CASH INCOME	21,123	480	8.94
Plus Inventory Change	-1,633	-37	-0.69
Less Depreciation	13,652	310	5.78
NET FARM INCOME	5,838	132	2.47

PRODUCTION COSTS

The cost of producing a hectolitre of milk for this group of farms was $36.52. Note that costs used in this calculation did not include operator and family labour and interest on equity. Milk receipts per hectolitre were $38.99 leaving a return of $2.47.

MILK PRODUCTION COSTS

	TOTAL	PER COW	PER 100 LITRES
	($)	($)	($)
TOTAL CURRENT EXP.	97415.	2213.98	41.25
DEPRECIATION	13652.	310.27	5.78
INVENTORY CHANGE	-1633.	-37.11	-.69
TOTAL FARMCOST	112700.	2561.36	47.72
SALES (EXCL. MILK)	26452.	601.19	11.20
COST OF PROD. MILK	86248.	1960.17	36.52
MILK RECEIPTS	92085.	2092.85	38.99
NET RETURN	5838.	132.68	2.47

BALANCE SHEET

For this group of farms, the balance sheet indicated an average investment of $296,362 and a debt load of $85,860. This showed an equity position of 71 per cent.

Land values were estimated to be $500 per acre for cleared land and $150 per acre for woodland.

Building and machinery values used where the undepreciated portion from the Capital Cost Allowance Schedule of the 1981 income tax returns.

Livestock was valued using figures from the farmer's record system when possible. If the figures were not available, the farmer was asked to estimate the value.

Crops and supplies were also valued using figures from the record keeping system. If estimates were necessary, the following guidelines were used:

Hay	$1.00/bale
Straw	$.60/bale
Mixed Grain	$143 per tonne
Silage	Variable (depending on type and moistures level)

BALANCE SHEET

ASSETS

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
LAND	35.54	105315.	2393.52	44.59
BUILDINGS	6.98	20682.	470.04	8.76
MACH. AND EQUIPMENT	15.34	45470.	1033.42	19.25
LIVESTOCK	34.25	101493.	2306.66	42.98
CROPS AND SUPPLIES	7.45	22070.	501.60	9.35
MILK QUOTA	.20	588.	13.37	.25
ACCTS. RECEIVABLE	.10	294.	6.68	.12
CASH	.15	450.	10.23	.19
TOTAL ASSETS	100.00	296362.	6735.51	125.49

LIABILITIES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
SHORT TERM	10.88	9341.	212.28	3.96
INTERMEDIATE TERM	42.77	36726.	834.68	15.55
LONG TERM	46.35	39793.	904.40	16.85
TOTAL LIABILITIES	100.00	85860.	1951.36	36.36
OWNER EQUITY		210503.	4784.15	89.14

MANAGEMENT ANALYSIS

A number of management factors were calculated to illusrate the financial, production and labour position for this group of dairy farms. A glossary of terms (see Appendix) provides definitions for the various management criteria examined.

FINANCIAL ANALYSIS:

Current Assets/Current Liabilities	2.44
Total Assets/total Liabilities	3.45
Debt/Equity	.41
Price Received per H.L. ($)	39.00
Net Farm Income Per Cow ($)	132.00
Investment Per Cow ($)	6,735.51
Value of Milk Sold Per Cow ($)	2,092.85
Value of Milk Sold ($)	92,085.00
Capital Turnover (years)	2.53
Equity in Business (%)	71.03
Return on Equity (%)	-5.88
Return on Investment (%)	-1.03

PRODUCTION ANALYSIS:

Average Number of Cows (head)	44.00
Fluid Milk Sold (lbs.)	0.00
(litres)	0.00
Industrial Milk Sold (lbs.)	536,081.86
(litres)	236,159.41
Total Milk Sold (lbs.)	536,081.86
(litres)	236,159.41
Milk Sold/Cow (lbs./cow)	12,183.68
(litres/cow)	5,367.26
Feed Expense/Milk Sales (%)	32.22
Feed Expense/Total Expense (%)	22.20

LABOUR ANALYSIS:

Worker Equivalents - family	.53
Worker Equivalents - operator	1.35
Worker Equivalents - Hired Labour	.68
Total Worker Equivalents	2.56
Milk Sold/Worker Equivalent (lbs.)	209,406.98
(litres)	92,249.77
Cows/Worker Equivalent (Head/Worker)	17.19
Labour Cost/Cow ($)	528.75

AVERAGE RESULTS OF SIXTEEN FARMS

PRODUCING LESS THAN 5,300 LITRES/COW/YEAR

REVENUE

Milk sales, including the federal milk subsidy, amounted to 71 per cent of the total farm revenue. The price per hectolitre (H.L.) including the federal milk subsidy was $40.62. The total operating (cash) revenue was $75,109 which was 97.5 per cent of total farm revenue.

The remaining 2.5 percent resulted from changes in inventory (-1.00 per cent livestock, 3.51 per cent crop and supply). For the majority of farm changes in inventory were estimated values.

REVENUE

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
FLUID MILK	0.00	0.	0.00	0.00
INDUSTRIAL MILK	58.96	45430.	1416.91	33.58
MILK SUBSIDY	12.37	9529.	297.21	7.04
L.STOCK DAIRY SALES	10.32	7951.	247.97	5.88
OTHER L.STOCK SALES	1.59	1226.	38.24	.91
FIELD CROP SALES	3.20	2466.	76.90	1.82
CASH CROP SALES	5.84	4500.	140.36	3.33
MISCELLANEOUS SALES	5.20	4007.	124.98	2.96
OPERATING REVENUE	97.48	75109.	2342.57	55.52
L.STOCK INVEN. CH.	-1.00	-767.	-23.93	-.57
CROP-SUPP. INV. CH.	3.51	2705.	84.37	2.00
ADJ. FOR INV. CH.	2.52	1938.	60.44	1.43
TOTAL FARM REVENUE	100.00	77047.	2403.01	56.95

EXPENSES

Dairy feed was the largest current expense followed by crop expenses and tractor-machinery repairs; 19 per cent, 12 per cent and 11 per cent respectively. The total current expenses amounted to $62,185 this was 86.05 per cent of total farm expenses.

Building and machinery depreciation made up the remaining 14 per cent (a total of $10,081) resulting in a total farm expenses of $72,266.

Depreciation for buildings was calculated at 10 per cent of the asset value. Machinery and equipment depreciation was estimated at 25 per cent.

EXPENSES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
MILK HAULING	2.52	1822.	56.84	1.35
DAIRY FEED	19.03	13755.	429.00	10.17
L.STOCK PURCHASES	4.79	3461.	107.93	2.56
VET AND DRUGS	1.62	1169.	36.45	.86
BREEDING	.11	82.	2.56	.06
DAIRY SUPPLIES	1.13	816.	25.46	.60
MILK MARKETING	6.82	4927.	153.65	3.64
OTHER CROP EXPENSE	12.36	8933.	278.62	6.60
BLDG. - FENCE RPR.	3.15	2274.	70.93	1.68
UTILITIES	2.82	2039.	63.60	1.51
TRACTOR - MACH. RPR.	11.73	8475.	264.33	6.27
TRUCK AND AUTO	.87	627.	19.57	.46
INTEREST	7.37	5323.	166.03	3.94
LABOUR	6.23	4501.	140.38	3.33
TAXES	.67	484.	15.09	.36
INSURANCE	1.17	842.	26.27	.62
MISCELLANEOUS	3.67	2654.	82.77	1.96
TOTAL CURRENT EXP.	86.05	62185.	1939.49	45.97
BLDG. DEPRECIATION	2.11	1525.	47.55	1.13
MACH. DEPRECIATION	11.84	8557.	266.87	6.33
TOTAL DEPRECIATION	13.95	10081.	314.42	7.45
TOTAL FARM EXPENSES	100.00	72266.	2253.92	53.42

INCOME SUMMARY

There are a number of different ways to measure income. In this section, two of the more common methods are highlighted.

1. Net Cash Income is the difference between annual operating revenue and total current expenses. For this group of farms, Net Cash Income amounted to $12,924 or $403 per cow.

2. Net Farm Income is the difference between annual operating revenue and current expenses with adjustments made for inventory change and depreciation. For this group of farms, Net Farm Income averaged $4,780 or $149 per cow. Net farm income in this instance represents the return to factors used in the production of milk. These include operator's labour (1.14 person years) and management, unpaid family labour (.76 person years) as well as a return to $156,585 of Owner's Equity.

INCOME SUMMARY

	TOTAL	PER COW	PER 100 LITRES
	($)	($)	($)
Total Operating Farm Income	75,109	2,342	55.52
Total Current Farm Expenses	62,185	1,939	45.97
NET CASH INCOME	12,924	403	9.55
Plus Inventory Change	1,938	60	1.43
Less Depreciation	10,081	314	7.45
NET FARM INCOME	4,780	149	3.53

PRODUCTION COSTS

The cost of producing a hectolitre of milk for this group of farms was $37.09. Note that costs used in this calculation did not include operator and family labour and interest on equity. Milk receipts per hectolitre were $40.63 leaving a return of $3.53.

MILK PRODUCTION COSTS

	TOTAL ($)	PER COW ($)	PER 100 LITRES ($)
TOTAL CURRENT EXP.	62185.	1939.49	45.97
DEPRECIATION	10081.	314.42	7.45
INVENTORY CHANGE	1938.	60.44	1.43
TOTAL FARMCOST	70328.	2193.47	51.99
SALES (EXCL. MILK)	20150.	628.45	14.90
COST OF PROD. MILK	50178.	1565.02	37.09
MILK RECEIPTS	54959.	1714.11	40.63
NET RETURN	4780.	149.09	3.53

BALANCE SHEET

For this group of farms, the balance sheet indicated an average investment of $212,023 and a debt load of $55,437. This showed an equity position of 74 per cent.

Land values were estimated to be $500 per acre for cleared land and $150 per acre for woodland.

Building and machinery values used where the undepreciated portion from the Capital Cost Allowance Schedule of the 1981 income tax returns.

Livestock was valued using figures from the farmer's record system when possible. If the figures were not available, the farmer was asked to estimate the value.

Crops and supplies were also valued using figures from the record keeping system. If estimates were necessary, the following guidelines were used:

Hay	$1.00/ bale
Straw	$.60/ bale
Mixed Grain	$143 per tonne
Silage	Variable (depending on type and moistures level)

BALANCE SHEET

ASSETS

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
LAND	40.98	86884.	2709.84	64.23
BUILDINGS	7.67	16257.	507.04	12.02
MACH. AND EQUIPMENT	15.92	33745.	1052.48	24.94
LIVESTOCK	27.43	58168.	1814.21	43.00
CROPS AND SUPPLIES	7.32	15512.	483.80	11.47
MILK QUOTA	.29	625.	19.49	.46
ACCTS. RECEIVABLE	.08	175.	5.46	.13
CASH	.31	656.	20.47	.49
TOTAL ASSETS	100.00	212023.	6612.79	156.73

LIABILITIES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
SHORT TERM	14.94	8284.	258.36	6.12
INTERMEDIATE TERM	47.70	26445.	824.79	19.55
LONG TERM	37.36	20709.	645.88	15.31
TOTAL LIABILITIES	100.00	55437.	1729.04	40.98
OWNER EQUITY		156585.	4883.75	115.75

MANAGEMENT ANALYSIS

A number of management factors were calculated to illusrate the financial, production and labour position for this group of dairy farms. A glossary of terms (see Appendix) provides definitions for the various management criteria examined.

FINANCIAL ANALYSIS:

Current Assets/Current Liabilities	1.97
Total Assets/total Liabilities	3.82
Debt/Equity	.35
Price Received per H.L. ($)	40.62
Net Farm Income Per Cow ($)	149.00
Investment Per Cow ($)	6,612.79
Value of Milk Sold Per Cow ($)	1,714.11
Value of Milk Sold ($)	54,959.00
Capital Turnover (years)	2.74
Equity in Business (%)	73.85
Return on Equity (%)	-7.73
Return on Investment (%)	-3.21

PRODUCTION ANALYSIS:

Average Number of Cows (head)	32.06
Fluid Milk Sold (lbs.)	0.00
(litres)	0.00
Industrial Milk Sold (lbs.)	307,080.92
(litres)	135,277.94
Total Milk Sold (lbs.)	307,080.92
(litres)	135,277.94
Milk Sold/Cow (lbs./cow)	9,577.57
(litres/cow)	4,219.19
Feed Expense/Milk Sales (%)	30.28
Feed Expense/Total Expense (%)	19.03

LABOUR ANALYSIS:

Worker Equivalents - family	.76
Worker Equivalents - operator	1.14
Worker Equivalents - Hired Labour	.53
Total Worker Equivalents	2.43
Milk Sold/Worker Equivalent (lbs.)	126,892.94
(litres)	55,899.97
Cows/Worker Equivalent (Head/Worker)	13.25
Labour Cost/Cow ($)	667.97

AVERAGE RESULTS OF THIRTEEN FARMS

PRODUCING MORE THAN 5,300 LITRES/COW/YEAR

REVENUE

Milk sales, including the federal milk subsidy, amounted to 84 per cent of the total farm revenue. The price per hectolitre (H.L.) including the federal milk subsidy was $36.87. The total operating (cash) revenue was $105,441.

There was an adjustment made of $-3,161 or -3.09 per cent to operating revenue to arrive at Total Farm Revenue. This represented the net change in inventory (-4.98 per cent livestock, 1.86 per cent crop and supply). For the majority of farm changes in inventory were estimated values.

REVENUE

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
FLUID MILK	0.00	0.	0.00	0.00
INDUSTRIAL MILK	70.61	72218.	1954.93	30.87
MILK SUBSIDY	13.72	14028.	379.74	6.00
L.STOCK DAIRY SALES	7.77	7943.	215.02	3.39
OTHER L.STOCK SALES	3.86	3948.	106.88	1.69
FIELD CROP SALES	.97	990.	26.79	.42
CASH CROP SALES	3.03	3104.	84.03	1.33
MISCELLANEOUS SALES	3.14	3211.	86.92	1.37
OPERATING REVENUE	103.09	105441.	2854.30	45.06
L.STOCK INVEN. CH.	-4.98	-5097.	-137.99	-2.18
CROP-SUPP. INV. CH.	1.89	1936.	52.41	.83
ADJ. FOR INV. CH.	-3.09	-3161.	-85.57	-1.35
TOTAL FARM REVENUE	100.00	102280.	2768.73	43.71

EXPENSES

Dairy feed was the largest current expense followed by crop expenses and interest; 25 per cent, 12 per cent and 9 per cent respectively. The total current expenses amounted to $84,652 this was 89 per cent of total farm expenses.

Building and machinery depreciation made up the remaining 11 per cent (a total of $10,316) resulting in a total farm expenses of $94,968.

Depreciation for buildings was calculated at 10 per cent of the asset value. Machinery and equipment depreciation was estimated at 25 per cent.

EXPENSES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
MILK HAULING	3.53	3355.	90.81	1.43
DAIRY FEED	24.80	23556.	637.66	10.07
L.STOCK PURCHASES	6.28	5960.	161.34	2.55
VET AND DRUGS	1.89	1795.	48.59	.77
BREEDING	.23	214.	5.81	.09
DAIRY SUPPLIES	1.32	1258.	34.05	.54
MILK MARKETING	8.40	7981.	216.06	3.41
OTHER CROP EXPENSE	11.92	11317.	306.35	4.84
BLDG. - FENCE RPR.	1.61	1530.	41.42	.65
UTILITIES	3.19	3030.	82.03	1.30
TRACTOR - MACH. RPR.	7.39	7018.	189.98	3.00
TRUCK AND AUTO	.71	677.	18.33	.29
INTEREST	8.79	8351.	226.07	3.57
LABOUR	4.22	4010.	108.56	1.71
TAXES	.88	838.	22.70	.36
INSURANCE	1.08	1029.	27.86	.44
MISCELLANEOUS	2.88	2731.	73.93	1.17
TOTAL CURRENT EXP.	89.14	84652.	2291.53	36.18
BLDG. DEPRECIATION	2.19	2076.	56.20	.89
MACH. DEPRECIATION	8.68	8240.	223.06	3.52
TOTAL DEPRECIATION	10.86	10316.	279.25	4.41
TOTAL FARM EXPENSES	100.00	94968.	2570.78	40.59

INCOME SUMMARY

There are a number of different ways to measure income. In this section, two of the more common methods are highlighted.

1. Net Cash Income is the difference between annual operating revenue and total current expenses. For this group of farms, Net Cash Income amounted to $20,789 or $563 per cow.

2. Net Farm Income is the difference between annual operating revenue and current expenses with adjustments made for inventory change and depreciation. For this group of farms, Net Farm Income averaged $7,312 or $198 per cow. Net farm income in this instance represents the return to factors used in the production of milk. These include operator's labour (1.29 person years) and management unpaid family labour (.42 person years) as well as a return to $193,280 of Owner's Equity.

INCOME SUMMARY

	TOTAL	PER COW	PER 100 LITRES
	($)	($)	($)
Total Operating Farm Income	105,441	2,854.30	45.06
Total Current Farm Expenses	84,652	2,291.53	36.18
NET CASH INCOME	20,789	562.77	8.88
Plus Inventory Change	-3,161	-85.57	-1.35
Less Depreciation	10,316	279.25	4.41
NET FARM INCOME	7,312	197.95	3.13

PRODUCTION COSTS

The cost of producing a hectolitre of milk for this group of farms was $33.74. Note that costs used in this calculation did not include operator and family labour and interest on equity. Milk receipts per hectolitre were $36.86 leaving a return of $3.13.

MILK PRODUCTION COSTS

	TOTAL ($)	PER COW ($)	PER 100 LITRES ($)
TOTAL CURRENT EXP.	84652.	2291.53	36.18
DEPRECIATION	10316.	279.25	4.41
INVENTORY CHANGE	-3161.	-85.57	-1.35
TOTAL FARMCOST	98129.	2656.36	41.94
SALES (EXCL. MILK)	19196.	519.63	8.20
COST OF PROD. MILK	78933.	2136.73	33.74
MILK RECEIPTS	86246.	2334.67	36.86
NET RETURN	7312.	197.95	3.13

BALANCE SHEET

For this group of farms, the balance sheet indicated an average investment of $262,355 and a debt load of $69,075. This showed an equity position of 74 per cent.

Land values were estimated to be $500 per acre for cleared land and $150 per acre for woodland.

Building and machinery values used where the undepreciated portion from the Capital Cost Allowance Schedule of the 1981 income tax returns.

Livestock was valued using figures from the farmer's record system when possible. If the figures were not available, the farmer was asked to estimate the value.

Crops and supplies were also valued using figures from the record keeping system. If estimates were necessary, the following guidelines were used:

Hay	$1.00/ bale
Straw	$.60/ bale
Mixed Grain	$143 per tonne
Silage	Variable (depending on type and moistures level)

BALANCE SHEET

ASSETS

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
LAND	33.26	87271.	2362.42	37.30
BUILDINGS	8.56	22449.	607.71	9.59
MACH. AND EQUIPMENT	13.40	35148.	951.46	15.02
LIVESTOCK	36.64	96134.	2602.36	41.09
CROPS AND SUPPLIES	7.51	19711.	533.58	8.42
MILK QUOTA	0.00	0.	0.00	0.00
ACCTS. RECEIVABLE	.23	603.	16.33	.26
CASH	.40	1038.	28.10	.44
TOTAL ASSETS	100.00	262355.	7101.96	112.13

LIABILITIES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
SHORT TERM	5.94	4105.	111.12	1.75
INTERMEDIATE TERM	22.89	15813.	428.07	6.76
LONG TERM	71.16	49157.	1330.67	21.01
TOTAL LIABILITIES	100.00	69075.	1869.86	29.52
OWNER EQUITY		193280.	5232.10	82.61

MANAGEMENT ANALYSIS

A number of management factors were calculated to illusrate the financial, production and labour position for this group of dairy farms. A glossary of terms (see Appendix) provides definitions for the various management criteria examined.

FINANCIAL ANALYSIS:

Current Assets/Current Liabilities	5.20
Total Assets/total Liabilities	3.80
Debt/Equity	.36
Price Received per H.L. ($)	36.86
Net Farm Income Per Cow ($)	197.95
Investment Per Cow ($)	7,101.96
Value of Milk Sold Per Cow ($)	2,334.67
Value of Milk Sold ($)	86,246.00
Capital Turnover (years)	2.55
Equity in Business (%)	73.67
Return on Equity (%)	-5.00
Return on Investment (%)	-.50

PRODUCTION ANALYSIS:

Average Number of Cows (head)	36.94
Fluid Milk Sold (lbs.)	0.00
(litres)	0.00
Industrial Milk Sold (lbs.)	531,129.93
(litres)	233,977.94
Total Milk Sold (lbs.)	531,129.93
(litres)	233,977.94
Milk Sold/Cow (lbs./cow)	14,377.72
(litres/cow)	6,333.80
Feed Expense/Milk Sales (%)	32.62
Feed Expense/Total Expense (%)	24.80

LABOUR ANALYSIS:

Worker Equivalents - family	.42
Worker Equivalents - operator	1.29
Worker Equivalents - Hired Labour	.47
Total Worker Equivalents	2.18
Milk Sold/Worker Equivalent (lbs.)	243,637.58
(litres)	107,329.33
Cows/Worker Equivalent (Head/Worker)	16.95
Labour Cost/Cow ($)	566.59

FLUID MILK SECTION

AVERAGE RESULTS OF TWENTY-FOUR FLUID MILK FARMS

REVENUE

Milk sales, including the Federal milk subsidy, amounted to 79 per cent of the total farm revenue. The price per hectolitre (H.L.) including the Federal milk subsidy was $37.57. The total operating (cash) revenue was $121,214 which was 98 per cent of total farm revenue.

The remaining 2 per cent resulted from changes in inventory (1.06 per cent livestock, 0.47 per cent crop and supply). For the majority of farms, changes in inventory were estimated values.

REVENUE

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
FLUID MILK	37.86	46603.	1119.59	17.97
INDUSTRIAL MILK	34.59	42585.	1023.06	16.42
MILK SUBSIDY	6.69	8235.	197.85	3.18
L.STOCK DAIRY SALES	9.95	12251.	294.33	4.72
OTHER L.STOCK SALES	4.44	5461.	131.20	2.11
FIELD CROP SALES	.37	461.	11.09	.18
CASH CROP SALES	2.14	2637.	63.36	1.02
MISCELLANEOUS SALES	2.42	2979.	71.57	1.15
OPERATING REVENUE	98.46	121214.	2912.04	46.75
L.STOCK INVEN. CH.	1.06	1308.	31.43	.50
CROP-SUPP. INV. CH.	.47	582.	13.99	.22
ADJ. FOR INV. CH.	1.54	1891.	45.42	.73
TOTAL FARM REVENUE	100.00	123105.	2957.47	47.47

EXPENSES

Dairy feed was the largest current expense followed by crop expenses and machinery repairs, 24 per cent, 12 per cent and 8 per cent respectively. The total current expenses amounted to $93,003 this was 88 per cent of total farm expenses.

Building and machinery depreciation made up the remaining 12 per cent (a total of $12,963) resulting in a total farm expense of $105,967.

Depreciation for buildings was calculated at 10 per cent of the asset value. Machinery and equipment depreciation was estimated at 25 per cent.

EXPENSES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
MILK HAULING	3.56	3775.	90.68	1.46
DAIRY FEED	23.93	25356.	609.16	9.78
L.STOCK PURCHASES	4.53	4802.	115.37	1.85
VET AND DRUGS	1.98	2100.	50.44	.81
BREEDING	.35	367.	8.81	.14
DAIRY SUPPLIES	1.76	1865.	44.80	.72
MILK MARKETING	5.29	5610.	134.77	2.16
OTHER CROP EXPENSE	12.10	12818.	307.94	4.94
BLDG. - FENCE RPR.	2.29	2423.	58.21	.93
UTILITIES	3.14	3326.	79.91	1.28
TRACTOR - MACH. RPR.	8.12	8599.	206.59	3.32
TRUCK AND AUTO	.95	1002.	24.08	.39
INTEREST	7.61	8062.	193.68	3.11
LABOUR	7.79	8250.	198.19	3.18
TAXES	.66	695.	16.69	.27
INSURANCE	1.18	1248.	29.98	.48
MISCELLANEOUS	2.55	2706.	65.00	1.04
TOTAL CURRENT EXP.	87.77	93003.	2234.32	35.87
BLDG. DEPRECIATION	2.55	2702.	64.92	1.04
MACH. DEPRECIATION	9.68	10261.	246.52	3.96
TOTAL DEPRECIATION	12.23	12963.	311.43	5.00
TOTAL FARM EXPENSES	100.00	105967.	2545.75	40.87

INCOME SUMMARY

There are a number of different ways to measure income. In this section, two of the more common methods are highlighted.

1. Net Cash Income is the difference between annual operating revenue and total current expenses. For this group of farms, Net Cash Income amounted to $28,211 or $678 per cow.

2. Net Farm Income is the difference between annual operating revenue and current expenses with adjustments made for inventory change and depreciation. For this group of farms, Net Farm Income averaged $17,138 or $412 per cow. In this instance Net Farm Income represents the return to factors used in the production of milk. These include operator's labour (1.60 person years) and management unpaid family labour (.45 person years) as well as a return to $230,307 of Owner's Equity.

INCOME SUMMARY

	TOTAL	PER COW	PER 100 LITRES
	($)	($)	($)
Total Operating Farm Income	121,214	2,912.04	46.75
Total Current Farm Expenses	93,003	2,234.32	35.87
NET CASH INCOME	28,211	677.72	10.88
Plus Inventory Change	1,891	45.42	.73
Less Depreciation	12,963	311.43	5.00
NET FARM INCOME	17,138	411.72	6.61

PRODUCTION COSTS

The cost of producing a hectolitre of milk for this group of farms was $30.96. Note that costs used in this calculation did not include operator and family labour and interest on equity. Milk receipts per hectolitre were $37.57 leaving a return of $6.61.

MILK PRODUCTION COSTS

	TOTAL ($)	PER COW ($)	PER 100 LITRES ($)
TOTAL CURRENT EXP.	93003.	2234.32	35.87
DEPRECIATION	12963.	311.43	5.00
INVENTORY CHANGE	1891.	45.42	.73
TOTAL FARMCOST	104076.	2500.33	40.14
SALES (EXCL. MILK)	23790.	571.54	9.17
COST OF PROD. MILK	80286.	1928.79	30.96
MILK RECEIPTS	97423.	2340.50	37.57
NET RETURN	17138.	411.72	6.61

BALANCE SHEET

For this group of farms, the balance sheet indicated an average investment of $304,511 and a debt load of $74,204. This showed an equity position of 76 per cent.

Land values were estimated to be $500 per acre for cleared land and $150 per acre for woodland.

Building and machinery values used where the undepreciated portion from the Capital Cost Allowance Schedule of the 1981 income tax returns.

Livestock was valued using figures from the farmer's record system when possible. If the figures were not available, the farmer was asked to estimate the value.

Crops and supplies were also valued using figures from the record keeping system. If estimates were necessary, the following guidelines were used:

Hay	$1.00/ bale
Straw	$.60/ bale
Mixed Grain	$143 per tonne
Silage	Variable (depending on type and moistures level)

BALANCE SHEET

ASSETS

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
LAND	35.18	107140.	2573.92	41.32
BUILDINGS	8.61	26212.	629.71	10.11
MACH. AND EQUIPMENT	13.74	41849.	1005.39	16.14
LIVESTOCK	35.57	108330.	2602.51	41.78
CROPS AND SUPPLIES	6.45	19654.	472.18	7.58
MILK QUOTA	.00	11.	.27	.00
ACCTS. RECEIVABLE	.03	103.	2.47	.04
CASH	.40	1212.	29.13	.47
TOTAL ASSETS	100.00	304511.	7315.57	117.43

LIABILITIES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
SHORT TERM	12.40	9202.	221.08	3.55
INTERMEDIATE TERM	25.58	18979.	455.95	7.32
LONG TERM	62.02	46022.	1105.64	17.75
TOTAL LIABILITIES	100.00	74204.	1782.67	28.62
OWNER EQUITY		230307.	5532.91	88.82

MANAGEMENT ANALYSIS

A number of management factors were calculated to illusrate the financial, production and labour position for this group of dairy farms. A glossary of terms (see Appendix) provides definitions for the various management criteria examined.

FINANCIAL ANALYSIS:

Current Assets/Current Liabilities	2.28
Total Assets/total Liabilities	4.10
Debt/Equity	.32
Price Received per H.L. ($)	37.57
Net Farm Income Per Cow ($)	411.72
Investment Per Cow ($)	7,315.57
Value of Milk Sold Per Cow ($)	2,340.50
Value of Milk Sold ($)	97,423.00
Capital Turnover (years)	2.46
Equity in Business (%)	75.63
Return on Equity (%)	-1.55
Return on Investment (%)	1.48

PRODUCTION ANALYSIS:

Average Number of Cows (head)	41.63
Fluid Milk Sold (lbs.)	257,978.31
(litres)	113,646.83
Industrial Milk Sold (lbs.)	330,652.08
(litres)	145,661.71
Total Milk Sold (lbs.)	588,630.39
(litres)	259,308.54
Milk Sold/Cow (lbs./cow)	14,141.27
(litres/cow)	6,229.63
Feed Expense/Milk Sales (%)	28.43
Feed Expense/Total Expense (%)	23.93

LABOUR ANALYSIS:

Worker Equivalents - family	.45
Worker Equivalents - operator	1.60
Worker Equivalents - Hired Labour	.97
Total Worker Equivalents	3.02
Milk Sold/Worker Equivalent (lbs.)	194,910.73
(litres)	85,863.76
Cows/Worker Equivalent (Head/Worker)	13.78
Labour Cost/Cow ($)	694.09

AVERAGE OF TWELVE FARMS WITH

FORTY COWS OR LESS

REVENUE

Milk sales, including the Federal milk subsidy, amounted to 72 per cent of the total farm revenue. The price per hectolitre (H.L.) including the Federal milk subsidy was $37.28. The total operating (cash) revenue was $96,685 which was 99 per cent of total farm revenue.

The remaining 1 per cent resulted from changes in inventory (1.02 per cent livestock, .06 per cent crop and supply). For the majority of farms, changes in inventory were estimated values.

REVENUE

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
FLUID MILK	32.57	31837.	1043.82	16.78
INDUSTRIAL MILK	33.42	32669.	1071.13	17.22
MILK SUBSIDY	6.36	6215.	203.78	3.28
L.STOCK DAIRY SALES	11.02	10768.	353.06	5.68
OTHER L.STOCK SALES	8.35	8161.	267.58	4.30
FIELD CROP SALES	.56	551.	18.06	.29
CASH CROP SALES	4.39	4292.	140.72	2.26
MISCELLANEOUS SALES	2.24	2192.	71.87	1.16
OPERATING REVENUE	98.92	96685.	3170.01	50.97
L.STOCK INVEN. CH.	1.02	998.	32.72	.53
CROP-SUPP. INV. CH.	.06	58.	1.90	.03
ADJ. FOR INV. CH.	1.08	1056.	34.62	.56
TOTAL FARM REVENUE	100.00	97741.	3204.63	51.53

EXPENSES

Dairy feed was the largest current expense followed by crop expenses and labour, 26 per cent, 11 per cent and 9 per cent respectively. The total current expenses amounted to $67,718 this was 89.5 per cent of total farm expenses.

Building and machinery depreciation made up the remaining 10.5 per cent (a total of $7,890) resulting in a total farm expense of $75,609.

Depreciation for buildings was calculated at 10 per cent of the asset value. Machinery and equipment depreciation was estimated at 25 per cent.

EXPENSES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
MILK HAULING	3.77	2847.	93.36	1.50
DAIRY FEED	25.67	19407.	636.31	10.23
L.STOCK PURCHASES	5.67	4285.	140.48	2.26
VET AND DRUGS	1.99	1504.	49.32	.79
BREEDING	.34	256.	8.39	.13
DAIRY SUPPLIES	1.25	942.	30.88	.50
MILK MARKETING	5.74	4342.	142.35	2.29
OTHER CROP EXPENSE	11.41	8626.	282.82	4.55
BLDG. - FENC. RPR.	2.27	1714.	56.20	.90
UTILITIES	3.60	2719.	89.15	1.43
TRACTOR - MACH. RPR.	8.32	6288.	206.17	3.31
TRUCK AND AUTO	1.27	959.	31.45	.51
INTEREST	4.19	3166.	103.79	1.67
LABOUR	8.78	6637.	217.59	3.50
TAXES	.76	574.	18.81	.30
INSURANCE	1.02	773.	25.34	.41
MISCELLANEOUS	3.54	2680.	87.87	1.41
TOTAL CURRENT EXP.	89.56	67718.	2220.27	35.70
BLDG. DEPRECIATION	1.95	1475.	48.37	.78
MACH. DEPRECIATION	8.48	6415.	210.34	3.38
TOTAL DEPRECIATION	10.44	7890.	258.70	4.16
TOTAL FARM EXPENSES	100.00	75609.	2478.97	39.86

INCOME SUMMARY

There are a number of different ways to measure income. In this section, two of the more common methods are highlighted.

1. Net Cash Income is the difference between annual operating revenue and total current expenses. For this group of farms, Net Cash Income amounted to $28,967 or $950 per cow.

2. Net Farm Income is the difference between annual operating revenue and current expenses with adjustments made for inventory change and depreciation. For this group of farms, Net Farm Income averaged $22,133 or $726 per cow. Net farm income in this instance represents the return to factors used in the production of milk. These include operator's labour (1.29 person years) and management, unpaid family labour (.47 person years) as well as a return to $220,242 of Owner's Equity.

INCOME SUMMARY

	TOTAL	PER COW	PER 100 LITRES
	($)	($)	($)
Total Operating Farm Income	96,685	3,170.01	50.97
Total Current Farm Expenses	67,718	2,220.27	35.70
NET CASH INCOME	28,967	949.74	15.27
Plus Inventory Change	1,056	34.62	.56
Less Depreciation	7,890	258.70	4.16
NET FARM INCOME	22,133	752.66	11.67

PRODUCTION COSTS

The cost of producing a hectolitre of milk for this group of farms was $25.61. Note that costs used in this calculation did not include operator and family labour and interest on equity. Milk receipts per hectolitre were $37.28 leaving a return of $11.67.

MILK PRODUCTION COSTS

	TOTAL	PER COW	PER 100 LITRES
	($)	($)	($)
TOTAL CURRENT EXP.	67718.	2220.27	35.70
DEPRECIATION	7890.	258.70	4.16
INVENTORY CHANGE	1056.	34.62	.56
TOTAL FARMCOST	74553.	2444.35	39.30
SALES (EXCL. MILK)	25964.	851.29	13.69
COST OF PROD. MILK	48589.	1593.07	25.61
MILK RECEIPTS	70721.	2318.72	37.28
NET RETURN	22133.	725.66	11.67

BALANCE SHEET

For this group of farms, the balance sheet indicated an average investment of $244,071 and a debt load of $23,829. This showed an equity position of 90 per cent.

Land values were estimated to be $500 per acre for cleared land and $150 per acre for woodland.

Building and machinery values used where the undepreciated portion from the Capital Cost Allowance Schedule of the 1981 income tax returns.

Livestock was valued using figures from the farmer's record system when possible. If the figures were not available, the farmer was asked to estimate the value.

Crops and supplies were also valued using figures from the record keeping system. If estimates were necessary, the following guidelines were used:

Hay	$1.00/bale
Straw	$.60/bale
Mixed Grain	$143 per tonne
Silage	Variable (depending on type and moistures level)

BALANCE SHEET

ASSETS

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
LAND	42.08	102700.	3367.21	54.14
BUILDINGS	6.31	15407.	505.15	8.12
MACH. AND EQUIPMENT	11.49	28041.	919.37	14.78
LIVESTOCK	33.55	81888.	2684.84	43.17
CROPS AND SUPPLIES	6.10	14893.	488.29	7.85
MILK QUOTA	0.00	0.	0.00	0.00
ACCTS. RECEIVABLE	.02	43.	1.40	.02
CASH	.45	1100.	36.07	.58
TOTAL ASSETS	100.00	244071.	8002.33	128.67

LIABILITIES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
SHORT TERM	21.45	5112.	167.60	2.69
INTERMEDIATE TERM	29.45	7017.	230.06	3.70
LONG TERM	49.10	11701.	383.63	6.17
TOTAL LIABILITIES	100.00	23829.	781.29	12.56
OWNER EQUITY		220242.	7221.04	116.10

MANAGEMENT ANALYSIS

A number of management factors were calculated to illusrate the financial, production and labour position for this group of dairy farms. A glossary of terms (see Appendix) provides definitions for the various management criteria examined.

FINANCIAL ANALYSIS:

Current Assets/Current Liabilities	3.14
Total Assets/total Liabilities	10.24
Debt/Equity	.11
Price Received per H.L. ($)	25.61
Net Farm Income Per Cow ($)	725.66
Investment Per Cow ($)	8,002.33
Value of Milk Sold Per Cow ($)	2,318.72
Value of Milk Sold ($)	70,721.00
Capital Turnover (years)	2.49
Equity in Business (%)	90.24
Return on Equity (%)	2.24
Return on Investment (%)	3.33

PRODUCTION ANALYSIS:

Average Number of Cows (head)	30.50
Fluid Milk Sold (lbs.)	173,986.23
(litres)	76,645.92
Industrial Milk Sold (lbs.)	256,620.47
(litres)	113,048.67
Total Milk Sold (lbs.)	430,606.70
(litres)	189,694.58
Milk Sold/Cow (lbs./cow)	14,118.25
(litres/cow)	6,219.49
Feed Expense/Milk Sales (%)	30.09
Feed Expense/Total Expense (%)	25.67

LABOUR ANALYSIS:

Worker Equivalents - family	.47
Worker Equivalents - operator	1.29
Worker Equivalents - Hired Labour	.78
Total Worker Equivalents	2.54
Milk Sold/Worker Equivalent (lbs.)	169,530.20
(litres)	74,682.91
Cows/Worker Equivalent (Head/Worker)	12.01
Labour Cost/Cow ($)	780.81

AVERAGE RESULTS OF TWELVE FARMS WITH MORE THAN FORTY COWS

REVENUE

Milk sales, including the Federal milk subsidy, amounted to 84 per cent of the total farm revenue. The price per hectolitre (H.L.) including the Federal milk subsidy was $37.74. The total operating (cash) revenue was $145,742 which was 98 per cent of total farm revenue.

The remaining 2 per cent resulted from changes in inventory (1.09 per cent livestock, .75 per cent crop and supply). For the majority of farms, changes in inventory were estimated values.

REVENUE

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
FLUID MILK	41.34	61370.	1163.40	18.66
INDUSTRIAL MILK	35.36	52501.	995.27	15.96
MILK SUBSIDY	6.91	10256.	194.42	3.12
L.STOCK DAIRY SALES	9.25	13734.	260.37	4.18
OTHER L.STOCK SALES	1.86	2761.	52.34	.84
FIELD CROP SALES	.25	372.	7.05	.11
CASH CROP SALES	.66	983.	18.63	.30
MISCELLANEOUS SALES	2.54	3766.	71.39	1.14
OPERATING REVENUE	98.16	145742.	2762.89	44.31
L.STOCK INVEN. CH.	1.09	1619.	30.69	.49
CROP-SUPP. INV. CH.	.75	1107.	20.98	.34
ADJ. FOR INV. CH.	1.84	2726.	51.67	.83
TOTAL FARM REVENUE	100.00	148468.	2814.56	45.14

EXPENSES

Dairy feed was the largest current expense followed by crop expenses and interest, 23 per cent, 12 per cent and 9.5 per cent respectively. The total current expenses amounted to $118,289 this was 86.7 per cent of total farm expenses.

Building and machinery depreciation made up the remaining 13.3 per cent (a total of $18,036) resulting in a total farm expense of $136,325.

Depreciation for buildings was calculated at 10 per cent of the asset value. Machinery and equipment depreciation was estimated at 25 per cent.

EXPENSES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
MILK HAULING	3.45	4702.	89.13	1.43
DAIRY FEED	22.96	31305.	593.47	9.52
L.STOCK PURCHASES	3.90	5320.	100.85	1.62
VET AND DRUGS	1.98	2695.	51.09	.82
BREEDING	.35	478.	9.06	.15
DAIRY SUPPLIES	2.04	2788.	52.85	.85
MILK MARKETING	5.05	6878.	130.39	2.09
OTHER CROP EXPENSE	12.48	17010.	322.47	5.17
BLDG. - FENCE RPR.	2.30	3132.	59.37	.95
UTILITIES	2.89	3934.	74.58	1.20
TRACTOR - MACH. RPR.	8.00	10911.	206.83	3.32
TRUCK AND AUTO	.77	1045.	19.82	.32
INTEREST	9.51	12958.	245.65	3.94
LABOUR	7.23	9863.	186.97	3.00
TAXES	.60	816.	15.47	.25
INSURANCE	1.26	1723.	32.67	.52
MISCELLANEOUS	2.00	2731.	51.78	.83
TOTAL CURRENT EXP.	86.77	118289.	2242.44	35.96
BLDG. DEPRECIATION	2.88	3929.	74.48	1.19
MACH. DEPRECIATION	10.35	14107.	267.44	4.29
TOTAL DEPRECIATION	13.23	18036.	341.92	5.48
TOTAL FARM EXPENSES	100.00	136325.	2584.36	41.45

INCOME SUMMARY

There are a number of different ways to measure income. In this section, two of the more common methods are highlighted.

1. Net Cash Income is the difference between annual operating revenue and total current expenses. For this group of farms, Net Cash Income amounted to $27,453 or $520 per cow.

2. Net Farm Income is the difference between annual operating revenue and current expenses with adjustments made for inventory change and depreciation. For this group of farms, Net Farm Income averaged $12,143 or $230 per cow. Net farm income in this instance represents the return to factors used in the production of milk. These include operator's labour (1.92 person years) and management, unpaid family labour (.43 person years) as well as a return to $240,373 of Owner's Equity.

INCOME SUMMARY

	TOTAL	PER COW	PER 100 LITRES
	($)	($)	($)
Total Operating Farm Income	145,742	2,762.89	44.31
Total Current Farm Expenses	118,289	2,242.44	35.96
NET CASH INCOME	27,453	520.45	8.35
Plus Inventory Change	2,726	51.67	.83
Less Depreciation	18,036	341.92	5.48
NET FARM INCOME	12,143	230.20	3.69

PRODUCTION COSTS

The cost of producing a hectolitre of milk for this group of farms was $34.05. Note that costs used in this calculation did not include operator and family labour and interest on equity. Milk receipts per hectolitre were $37.74 leaving a return of $3.69.

MILK PRODUCTION COSTS

	TOTAL	PER COW	PER 100 LITRES
	($)	($)	($)
TOTAL CURRENT EXP.	118289.	2242.44	35.96
DEPRECIATION	18036.	341.92	5.48
INVENTORY CHANGE	2726.	51.67	.83
TOTAL FARMCOST	133600.	2532.69	40.62
SALES (EXCL. MILK)	21617.	409.79	6.57
COST OF PROD. MILK	111983.	2122.90	34.05
MILK RECEIPTS	124126.	2353.10	37.74
NET RETURN	12143.	230.20	3.69

BALANCE SHEET

For this group of farms, the balance sheet indicated an average investment of $364,950 and a debt load of $124,578. This showed an equity position of 66 per cent.

Land values were estimated to be $500 per acre for cleared land and $150 per acre for woodland.

Building and machinery values used where the undepreciated portion from the Capital Cost Allowance Schedule of the 1981 income tax returns.

Livestock was valued using figures from the farmer's record system when possible. If the figures were not available, the farmer was asked to estimate the value.

Crops and supplies were also valued using figures from the record keeping system. If estimates were necessary, the following guidelines were used:

Hay	$1.00/bale
Straw	$.60/bale
Mixed Grain	$143 per tonne
Silage	Variable (depending on type and moistures level)

BALANCE SHEET

ASSETS

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
LAND	30.57	111579.	2115.24	33.92
BUILDINGS	10.14	37016.	701.73	11.25
MACH. AND EQUIPMENT	15.25	55658.	1055.12	16.92
LIVESTOCK	36.93	134772.	2554.91	40.97
CROPS AND SUPPLIES	6.69	24416.	462.86	7.42
MILK QUOTA	.01	22.	.42	.01
ACCTS. RECEIVABLE	.04	163.	3.09	.05
CASH	.36	1325.	25.12	.40
TOTAL ASSETS	100.00	364950.	6918.49	110.95

LIABILITIES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
SHORT TERM	10.67	13293.	252.00	4.04
INTERMEDIATE TERM	24.84	30941.	586.56	9.41
LONG TERM	64.49	80344.	1523.10	24.43
TOTAL LIABILITIES	100.00	124578.	2361.66	37.87
OWNER EQUITY		240373.	4556.83	73.08

MANAGEMENT ANALYSIS

A number of management factors were calculated to illusrate the financial, production and labour position for this group of dairy farms. A glossary of terms (see Appendix) provides definitions for the various management criteria examined.

FINANCIAL ANALYSIS:

Current Assets/Current Liabilities	1.95
Total Assets/total Liabilities	2.93
Debt/Equity	.52
Price Received per H.L. ($)	37.74
Net Farm Income Per Cow ($)	230.20
Investment Per Cow ($)	6,918.49
Value of Milk Sold Per Cow ($)	2,353.10
Value of Milk Sold ($)	124,126.00
Capital Turnover (years)	2.45
Equity in Business (%)	65.86
Return on Equity (%)	-5.02
Return on Investment (%)	-.25

PRODUCTION ANALYSIS:

Average Number of Cows (head)	52.75
Fluid Milk Sold (lbs.)	341,970.39
(litres)	150,647.75
Industrial Milk Sold (lbs.)	404,683.68
(litres)	178,274.75
Total Milk Sold (lbs.)	746,654.07
(litres)	328,922.50
Milk Sold/Cow (lbs./cow)	14,154.58
(litres/cow)	6,235.50
Feed Expense/Milk Sales (%)	27.49
Feed Expense/Total Expense (%)	22.96

LABOUR ANALYSIS:

Worker Equivalents - family	.43
Worker Equivalents - operator	1.92
Worker Equivalents - Hired Labour	1.16
Total Worker Equivalents	3.51
Milk Sold/Worker Equivalent (lbs.)	212,721.96
(litres)	93,710.11
Cows/Worker Equivalent (Head/Worker)	15.03
Labour Cost/Cow ($)	646.25

AVERAGE RESULTS OF TWELVE FARMS PRODUCING LESS THAN 6,000 LITRES/COW/YEAR

REVENUE

Milk sales, including the Federal milk subsidy, amounted to 84 per cent of the total farm revenue. The price per hectolitre (H.L.) including the Federal milk subsidy was $37.13. The total operating (cash) revenue was $112,096 which was 99.3 per cent of total farm revenue.

The remaining .7 per cent resulted from changes in inventory (1.1 per cent livestock, -.5 per cent crop and supply). For the majority of farms, changes in inventory were estimated values.

REVENUE

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
FLUID MILK	38.02	42905.	948.18	16.77
INDUSTRIAL MILK	38.66	43619.	963.95	17.05
MILK SUBSIDY	7.51	8475.	187.29	3.31
L.STOCK DAIRY SALES	6.86	7739.	171.03	3.03
OTHER L.STOCK SALES	2.83	3194.	70.58	1.25
FIELD CROP SALES	.21	234.	5.16	.09
CASH CROP SALES	2.44	2759.	60.96	1.08
MISCELLANEOUS SALES	2.81	3172.	70.10	1.24
OPERATING REVENUE	99.34	112096.	2477.25	43.82
L.STOCK INVEN. CH.	1.16	1307.	28.89	.51
CROP-SUPP. INV. CH.	-.50	-562.	-12.42	-.22
ADJ. FOR INV. CH.	.66	745.	16.47	.29
TOTAL FARM REVENUE	100.00	112841.	2493.72	44.11

EXPENSES

Dairy feed was the largest current expense followed by crop expenses and machinery repairs, 23 per cent, 13 per cent and 10 per cent respectively. The total current expenses amounted to $85,642 this was 87 per cent of total farm expenses.

Building and machinery depreciation made up the remaining 13 per cent (a total of $13,289) resulting in a total farm expense of $98,931.

Depreciation for buildings was calculated at 10 per cent of the asset value. Machinery and equipment depreciation was estimated at 25 per cent.

EXPENSES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
MILK HAULING	3.75	3710.	82.00	1.45
DAIRY FEED	23.17	22919.	506.49	8.96
L.STOCK PURCHASES	2.73	2706.	59.79	1.06
VET AND DRUGS	1.50	1487.	32.86	.58
BREEDING	.42	412.	9.10	.16
DAIRY SUPPLIES	2.38	2352.	51.97	.92
MILK MARKETING	5.69	5625.	124.32	2.20
OTHER CROP EXPENSE	13.24	13094.	289.37	5.12
BLDG. - FENCE RPR.	2.60	2573.	56.85	1.01
UTILITIES	3.07	3041.	67.21	1.19
TRACTOR - MACH. RPR.	9.96	9853.	217.74	3.85
TRUCK AND AUTO	1.03	1018.	22.50	.40
INTEREST	8.42	8332.	184.13	3.26
LABOUR	4.32	4278.	94.55	1.67
TAXES	.62	614.	13.56	.24
INSURANCE	1.29	1275.	28.19	.50
MISCELLANEOUS	2.38	2354.	52.02	.92
TOTAL CURRENT EXP.	86.57	85642.	1892.65	33.48
BLDG. DEPRECIATION	2.86	2834.	62.62	1.11
MACH. DEPRECIATION	10.57	10455.	231.06	4.09
TOTAL DEPRECIATION	13.43	13289.	293.68	5.19
TOTAL FARM EXPENSES	100.00	98931.	2186.33	38.67

INCOME SUMMARY

There are a number of different ways to measure income. In this section, two of the more common methods are highlighted.

1. Net Cash Income is the difference between annual operating revenue and total current expenses. For this group of farms, Net Cash Income amounted to $26,454 or $585 per cow.

2. Net Farm Income is the difference between annual operating revenue and current expenses with adjustments made for inventory change and depreciation. For this group of farms, Net Farm Income averaged $13,909 or $307 per cow. Net farm income in this instance represents the return to factors used in the production of milk. These include operator's labour (1.75 person years) and management unpaid family labour (.57 person years) as well as a return to $225,710 of Owner's Equity.

INCOME SUMMARY

	TOTAL	PER COW	PER 100 LITRES
	($)	($)	($)
Total Operating Farm Income	112,096	2,477.25	43.82
Total Current Farm Expenses	85,642	1,892.65	33.48
NET CASH INCOME	26,454	584.60	10.34
Plus Inventory Change	745	16.47	.29
Less Depreciation	13,289	293.68	5.19
NET FARM INCOME	13,909	307.39	5.44

PRODUCTION COSTS

The cost of producing a hectolitre of milk for this group of farms was $31.70. Note that costs used in this calculation did not include operator and family labour and interest on equity. Milk receipts per hectolitre were $37.13 leaving a return of $5.44.

MILK PRODUCTION COSTS

	TOTAL ($)	PER COW ($)	PER 100 LITRES ($)
TOTAL CURRENT EXP.	85642.	1892.65	33.48
DEPRECIATION	13289.	293.68	5.19
INVENTORY CHANGE	745.	16.47	.29
TOTAL FARMCOST	98186.	2169.86	38.38
SALES (EXCL. MILK)	17097.	377.83	6.68
COST OF PROD. MILK	81090.	1792.03	31.70
MILK RECEIPTS	94999.	2099.42	37.13
NET RETURN	13909.	307.39	5.44

BALANCE SHEET

For this group of farms, the balance sheet indicated an average investment of $305,207 and a debt load of $79,498. This showed an equity position of 74 per cent.

Land values were estimated to be $500 per acre for cleared land and $150 per acre for woodland.

Building and machinery values used where the undepreciated portion from the Capital Cost Allowance Schedule of the 1981 income tax returns.

Livestock was valued using figures from the farmer's record system when possible. If the figures were not available, the farmer was asked to estimate the value.

Crops and supplies were also valued using figures from the record keeping system. If estimates were necessary, the following guidelines were used:

Hay	$1.00/ bale
Straw	$.60/ bale
Mixed Grain	$143 per tonne
Silage	Variable (depending on type and moistures level)

BALANCE SHEET

ASSETS

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
LAND	36.14	110308.	2437.75	43.12
BUILDINGS	8.58	26200.	579.01	10.24
MACH. AND EQUIPMENT	13.55	41364.	914.13	16.17
LIVESTOCK	35.16	107298.	2371.22	41.94
CROPS AND SUPPLIES	6.25	19077.	421.60	7.46
MILK QUOTA	0.00	0.	0.00	0.00
ACCTS. RECEIVABLE	.01	43.	.95	.02
CASH	.30	917.	20.26	.36
TOTAL ASSETS	100.00	305207.	6744.91	119.30

LIABILITIES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
SHORT TERM	14.41	11452.	253.09	4.48
INTERMEDIATE TERM	29.62	23544.	520.30	9.20
LONG TERM	55.98	44502.	983.47	17.40
TOTAL LIABILITIES	100.00	79498.	1756.86	31.07
OWNER EQUITY		225710.	4988.06	88.23

MANAGEMENT ANALYSIS

A number of management factors were calculated to illustrate the financial, production and labour position for this group of dairy farms. A glossary of terms (see Appendix) provides definitions for the various management criteria examined.

FINANCIAL ANALYSIS:

Current Assets/Current Liabilities	1.74
Total Assets/total Liabilities	3.84
Debt/Equity	.35
Price Received per H.L. ($)	37.13
Net Farm Income Per Cow ($)	307.39
Investment Per Cow ($)	6,744.91
Value of Milk Sold Per Cow ($)	2,099.42
Value of Milk Sold ($)	94,999.00
Capital Turnover (years)	2.70
Equity in Business (%)	73.95
Return on Equity (%)	-4.03
Return on Investment (%)	-.25

PRODUCTION ANALYSIS:

Average Number of Cows (head)	45.25
Fluid Milk Sold (lbs.)	242,109.69
(litres)	106,656.25
Industrial Milk Sold (lbs.)	338,615.90
(litres)	149,170.00
Total Milk Sold (lbs.)	580,725.59
(litres)	255,826.25
Milk Sold/Cow (lbs./cow)	12,833.71
(litres/cow)	5,653.62
Feed Expense/Milk Sales (%)	26.49
Feed Expense/Total Expense (%)	23.17

LABOUR ANALYSIS:

Worker Equivalents - family	.57
Worker Equivalents - operator	1.75
Worker Equivalents - Hired Labour	.50
Total Worker Equivalents	2.82
Milk Sold/Worker Equivalent (lbs.)	205,931.06
(litres)	90,718.53
Cows/Worker Equivalent (Head/Worker)	16.05
Labour Cost/Cow ($)	601.65

AVERAGE RESULTS OF TWELVE FARMS PRODUCING MORE THAN 6,000 LITRES/COW/YEAR

REVENUE

Milk sales, including the Federal milk subsidy, amounted to 75 per cent of the total farm revenue. The price per hectolitre (H.L.) including the Federal milk subsidy was $38.00. The total operating (cash) revenue was $130,332 which was 97.7 per cent of total farm revenue.

The remaining 2.3 per cent resulted from changes in inventory (.98 per cent livestock, 1.29 per cent crop and supply). For the majority of farms, changes in inventory were estimated values.

REVENUE

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
FLUID MILK	37.72	50301.	1323.71	19.14
INDUSTRIAL MILK	31.16	41551.	1093.46	15.81
MILK SUBSIDY	6.00	7996.	210.42	3.04
L.STOCK DAIRY SALES	12.57	16764.	441.15	6.38
OTHER L.STOCK SALES	5.80	7729.	203.39	2.94
FIELD CROP SALES	.52	689.	18.14	.26
CASH CROP SALES	1.89	2516.	66.21	.96
MISCELLANEOUS SALES	2.09	2786.	73.32	1.06
OPERATING REVENUE	97.72	130332.	3429.79	49.60
L.STOCK INVEN. CH.	.98	1310.	34.46	.50
CROP-SUPP. INV. CH.	1.29	1727.	45.44	.66
ADJ. FOR INV. CH.	2.28	3036.	79.91	1.16
TOTAL FARM REVENUE	100.00	133368.	3509.70	50.75

EXPENSES

Dairy feed was the largest current expense followed by crop expenses and labour, 23 per cent, 11 per cent and 10.8 per cent respectively. The total current expenses amounted to $100,365 this was 89 per cent of total farm expenses.

Building and machinery depreciation made up the remaining 11 per cent (a total of $12,638) resulting in a total farm expense of $113,002.

Depreciation for buildings was calculated at 10 per cent of the asset value. Machinery and equipment depreciation was estimated at 25 per cent.

EXPENSES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
MILK HAULING	3.40	3839.	101.02	1.46
DAIRY FEED	24.60	27794.	731.42	10.58
L.STOCK PURCHASES	6.11	6899.	181.55	2.63
VET AND DRUGS	2.40	2712.	71.38	1.03
BREEDING	.28	322.	8.46	.12
DAIRY SUPPLIES	1.22	1378.	36.27	.52
MILK MARKETING	4.95	5595.	147.23	2.13
OTHER CROP EXPENSE	11.10	12542.	330.05	4.77
BLDG. - FENCE RPR.	2.01	2273.	59.83	.87
UTILITIES	3.20	3612.	95.04	1.37
TRACTOR - MACH. RPR.	6.50	7346.	193.31	2.80
TRUCK AND AUTO	.87	987.	25.96	.38
INTEREST	6.90	7792.	205.05	2.96
LABOUR	10.81	12221.	321.60	4.65
TAXES	.69	776.	20.43	.30
INSURANCE	1.08	1221.	32.12	.46
MISCELLANEOUS	2.71	3058.	80.46	1.16
TOTAL CURRENT EXP.	88.82	100365.	2641.18	38.19
BLDG. DEPRECIATION	2.27	2571.	67.64	.98
MACH. DEPRECIATION	8.91	10067.	264.93	3.83
TOTAL DEPRECIATION	11.18	12638.	332.57	4.81
TOTAL FARM EXPENSES	100.00	113002.	2973.75	43.00

INCOME SUMMARY

There are a number of different ways to measure income. In this section, two of the more common methods are highlighted.

1. Net Cash Income is the difference between annual operating revenue and total current expenses. For this group of farms, Net Cash Income amounted to $29,967 or $788 per cow.

2. Net Farm Income is the difference between annual operating revenue and current expenses with adjustments made for inventory change and depreciation. For this group of farms, Net Farm Income averaged $20,366 or $536 per cow. Net farm income in this instance represents the return to factors used in the production of milk. These include operator's labour (1.46 person years) and management unpaid family labour (.33 person years) as well as a return to $234,905 of Owner's Equity.

INCOME SUMMARY

	TOTAL	PER COW	PER 100 LITRES
	($)	($)	($)
Total Operating Farm Income	130,332	3,429.79	49.60
Total Current Farm Expenses	100,365	2,641.18	38.19
NET CASH INCOME	29,967	788.61	11.41
Plus Inventory Change	3,036	79.91	1.16
Less Depreciation	12,638	332.57	4.81
NET FARM INCOME	20,366	535.95	7.75

PRODUCTION COSTS

The cost of producing a hectolitre of milk for this group of farms was $30.25. Note that costs used in this calculation did not include operator and family labour and interest on equity. Milk receipts per hectolitre were $38.00 leaving a return of $7.75.

MILK PRODUCTION COSTS

	TOTAL	PER COW	PER 100 LITRES
	($)	($)	($)
TOTAL CURRENT EXP.	100365.	2641.18	38.19
DEPRECIATION	12638.	332.57	4.81
INVENTORY CHANGE	3036.	79.91	1.16
TOTAL FARMCOST	109966.	2893.84	41.85
SALES (EXCL. MILK)	30484.	802.21	11.60
COST OF PROD. MILK	79482.	2091.63	30.25
MILK RECEIPTS	99848.	2627.58	38.00
NET RETURN	20366.	535.95	7.75

BALANCE SHEET

For this group of farms, the balance sheet indicated an average investment of $303,814 and a debt load of $68,909. This showed an equity position of 77 per cent.

Land values were estimated to be $500 per acre for cleared land and $150 per acre for woodland.

Building and machinery values used where the undepreciated portion from the Capital Cost Allowance Schedule of the 1981 income tax returns.

Livestock was valued using figures from the farmer's record system when possible. If the figures were not available, the farmer was asked to estimate the value.

Crops and supplies were also valued using figures from the record keeping system. If estimates were necessary, the following guidelines were used:

Hay	$1.00/ bale
Straw	$.60/ bale
Mixed Grain	$143 per tonne
Silage	Variable (depending on type and moistures level)

BALANCE SHEET

ASSETS

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
LAND	34.22	103971.	2736.07	39.56
BUILDINGS	8.63	26223.	690.09	9.98
MACH. AND EQUIPMENT	13.93	42334.	1114.05	16.11
LIVESTOCK	36.00	109362.	2877.94	41.62
CROPS AND SUPPLIES	6.66	20231.	532.40	7.70
MILK QUOTA	.01	22.	.58	.01
ACCTS. RECEIVABLE	.05	163.	4.28	.06
CASH	.50	1508.	39.69	.57
TOTAL ASSETS	100.00	303814.	7995.11	115.61

LIABILITIES

	PERCENTAGE	TOTAL	PER COW	PER 100 LITRES
	(%)	($)	($)	($)
SHORT TERM	10.09	6952.	182.96	2.65
INTERMEDIATE TERM	20.92	14414.	379.32	5.49
LONG TERM	68.99	47543.	1251.12	18.09
TOTAL LIABILITIES	100.00	68909.	1813.40	26.22
OWNER EQUITY		234905.	6181.71	89.39

MANAGEMENT ANALYSIS

A number of management factors were calculated to illusrate the financial, production and labour position for this group of dairy farms. A glossary of terms (see Appendix) provides definitions for the various management criteria examined.

FINANCIAL ANALYSIS:

Current Assets/Current Liabilities	3.15
Total Assets/total Liabilities	4.41
Debt/Equity	.29
Price Received per H.L. ($)	38.00
Net Farm Income Per Cow ($)	535.95
Investment Per Cow ($)	7,995.11
Value of Milk Sold Per Cow ($)	2,627.58
Value of Milk Sold ($)	99,848.00
Capital Turnover (years)	2.27
Equity in Business (%)	77.32
Return on Equity (%)	.83
Return on Investment (%)	3.22

PRODUCTION ANALYSIS:

Average Number of Cows (head)	38.00
Fluid Milk Sold (lbs.)	273,846.94
(litres)	120,637.42
Industrial Milk Sold (lbs.)	322,688.26
(litres)	142,153.42
Total Milk Sold (lbs.)	596,535.19
(litres)	262,790.83
Milk Sold/Cow (lbs./cow)	15,698.29
(litres/cow)	6,915.55
Feed Expense/Milk Sales (%)	30.26
Feed Expense/Total Expense (%)	24.60

LABOUR ANALYSIS:

Worker Equivalents - family	.33
Worker Equivalents - operator	1.46
Worker Equivalents - Hired Labour	1.44
Total Worker Equivalents	3.22
Milk Sold/Worker Equivalent (lbs.)	185,259.38
(litres)	81,612.06
Cows/Worker Equivalent (Head/Worker)	11.80
Labour Cost/Cow ($)	807.36

CONCLUSIONS

Standards of performance and business progress are matters of personal choice and family goal setting. Each farm family will have a different set of goals or objectives that must be met through the farm business. It is for each farmer to identify these and then compare performance in achieving these objectives.

There are several ways to assess farm performance. These include:

- Comparing this year's performance with last year's.
- Comparing performance with group average data for farms of similar size and general characteristics, eg. this study.
- Comparing performance to that found by research - realizing that the research data were obtained under a special set of conditions.

This principal value of an analysis of financial data is that it suggests questions that need to be answered. It acts as an indicator of potential problems.

APPENDIX

Definition of Terms

1. Current Asset/Current Liabilities (Current Ratio) is a test of a business' ability to meet current obligations. If current assets do not exceed current liabilities by a comfortable margin, that is if the current ratio is less than one, the business may have difficulty in meeting its obligations.

2. Total Assets/Total Liabilities (Solvency Ratio) is a test of a business' ability to meet all obligations. If the ratio is less than one, the business is insolvent, that is the business has more debt than assets.

3. Debt/Equity Ratio describes debt and equity position of the business. A ratio of greater than one indicates that the majority of the business is financed by debt.

4. Capital Turnover describes the length of time (in years) required for the business to generate sufficient gross revenue to equal total capital invested. The ratio is total capital invested divided by gross revenue.

5. Equity in Business describes the percentage of total assets not financed by debt.

6. Return on Equity describes the earning power of the business' equity (after adjustments are made for unpaid family and operator labour). The calculations is net returns divided by equity times 100 per cent.

7. Return on Investment describes the earning power of the total assets of the business (after adjustments are made for unpaid family and operator labour). The calculation is net returns divided by total assets times 100 per cent.

8. Worker Equivalent is equal to one person working for one full year (a person year).

This input form may be completed and returned to:

Department of Agriculture & Forestry
Marketing Branch
PO Box 2 000
Charlottetown, PEI
C1A 7N8

In return, you will receive a detailed analysis on your farm business and will be included in next year's study (1982).

FOR THE PROVINCE OF _____ FOR 19____

REC1:	Farm I.D. Number	
REC2:	Average number of cows	Head _____
	Fluid litres of milk sold	Litres _____
	Manufactured litres sold	Litres _____
	Man equivalents of operator and family	Man _____
REC3:	Fluid milk sales	$ _____
	Manufactured milk sales	$ _____
	Milk subsidy	$ _____
	Livestock sales dairy	$ _____
	Other livestock sales	$ _____
	Field crop sales	$ _____
	Cash crop sales	$ _____
	Miscellaneous Sales	$ _____
	Livestock inventory change	$ _____
	Crops and supplies inventory change	$ _____
REC4:	Milk hauling	$ _____
	Dairy feed	$ _____
	Livestock purchases	$ _____
	Veterinary and drug	$ _____

	Breeding	$ _____
	Dairy supplies	$ _____
	Milk marketing costs	$ _____
	Other crop expenses	$ _____
	Building and fences	$ _____
	Utilities	$ _____
REC5:	Tractor and machinery	$ _____
	Truck and auto	$ _____
	Interest	$ _____
	Labour	$ _____
	Taxes	$ _____
	Insurance	$ _____
	Miscellaneous	$ _____
	Building depreciation	$ _____
	Machinery depreciation	$ _____
REC6:	Land value	$ _____
	Building value	$ _____
	Machinery and equipment	$ _____
	Livestock	$ _____
	Crops and supplies	$ _____
	Milk quota	$ _____
	Accounts receivable	$ _____
	Cash on hand	$ _____
REC7:	Short-term liabilities	$ _____
	Intermediate liabilities	$ _____

	Long-term liabilities	$	_____
	Purchased feed	Kilogram	_____
REC8:	Family labour payment level	$	_____
	Operator labour payment level	$	_____
	Hired labour payment level	$	_____
	Operator man equivalent	Man	_____